

1

Disclaimer

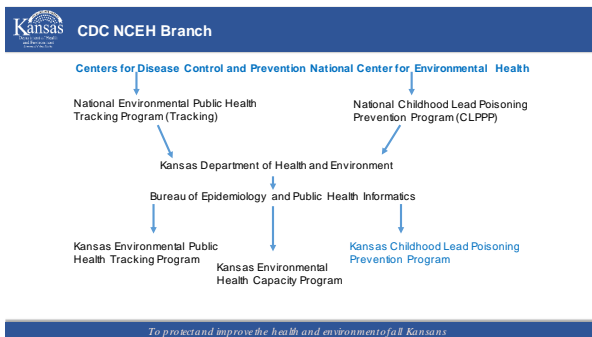
This webinar was supported by the Cooperative Agreement Number, 6 NUE2EH001406-02-03, funded by the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the author and do not necessarily represent the official views of any Agency.

CHECKLIST

- ☒
- ☒
- ☐
- ☐

To protect and improve the health and environment of all Kansans

2



3

Agenda

KDHE Childhood Lead Poisoning Prevention Program


- Purpose of Program
- Lead Reduction Goals
- Testing Recommendations and Regulations
- WIC Collaboration
- Next Steps

To protect and improve the health and environment of all Kansans

4

Kansas Introduction

Purpose of Childhood Lead Poisoning Prevention Program



- To work with state and local agencies to promote blood lead testing awareness and education.
- To provide guidance materials to local health departments to assist with blood lead testing case management.
- To conduct surveillance and data analysis to target interventions for high-risk geographic areas and at-risk populations.
- To develop relationships with communities to address lead-related priorities and opportunities.

To protect and improve the health and environment of all Kansans

5

Kansas

Children Are Most At-Risk for Lead Poisoning

- No safe blood lead level in children has been identified.
- Lead exposure in children can result from multiple sources and can cause irreversible and life-long health effects.
- Even low levels of lead in blood have been shown to effect IQ, ability to pay attention and academic achievement. – Executive Summary Federal Action Plan

To protect and improve the health and environment of all Kansans

6

Kansas Healthy People 2030

Healthy People 2030 Environmental Health objectives:

- EH-2030-05 **Reduce blood lead level in children aged 1–5 years** National Health and Nutrition Examination Survey (NHANES), CDC/NCHS
- EH-2030-09 **Reduce exposure to lead in the population**, as measured by blood or urine concentrations of the substance or its metabolites, National Report on Human Exposure to Environmental Chemicals, CDC/NCEH
- EH-2030-13 **Increase the number of states, territories, tribes, and the District of Columbia that monitor diseases or conditions that can be caused by exposure to lead poisoning**, State Reportable Conditions Data Inventory, Council of State and Territorial Epidemiologists (CSTE)
- OSH-2030-05 **Reduce the rate of elevated blood lead levels in adults with work-related lead exposure** Adult Blood Lead Epidemiology and Surveillance Program (ABLES), CDC/NIOSH

To protect and improve the health and environment of all Kansans

7

Kansas Federal Action Plan


FEDERAL ACTION PLAN

To Reduce Childhood Lead Exposures and Associated Health Impacts

Lead exposure in children can result from multiple sources and can cause irreversible and life-long health effects.

No safe blood lead level in children has been identified.

Even low levels of lead in blood have been shown to effect IQ, ability to pay attention and academic achievement. – Executive Summary



**CAUTION
LEAD HAZARD
KEEP OUT
DO NOT ENTER UNDER ANY CIRCUMSTANCES**

FEDERAL ACTION PLAN
To Reduce Childhood Lead Exposures and Associated Health Impacts

PRESENTED TO THE HOUSE OF REPRESENTATIVES
HEALTH, HUMAN AND SAFETY WAYS TO CARE COMMITTEE
DECEMBER 2018

To protect and improve the health and environment of all Kansans

8

Bright Futures AAP EPSDT Schedule	
<p>Recommendations for Preventive Pediatric Health Care <small>Adapted from American Academy of Pediatrics, Bright Futures: Clinical Guidelines for the Comprehensive Care of Infants, Children, and Adolescents, 4th ed. (2018). Copyright 2018 by American Academy of Pediatrics. All rights reserved.</small></p>	

9

		Lead Risk Questionnaire																	
<p>Purpose: To identify children who need to be tested for lead exposure</p> <p>Instructions:</p> <ul style="list-style-type: none"> If Yes or Don't Know, test the child immediately For more information, contact your county's local health department 																			
Patient's Name: _____		DOB: _____ Medicaid #: _____																	
Provider's Name: _____		Administered by: _____ Date: _____																	
<p>Questions:</p> <ol style="list-style-type: none"> Does your child live in or visit a home, day-care or other building built before 1978? Does your child live in or visit a home, day-care or other building with ongoing repairs or remodeling? Does your child eat or drink on non-food things like paint chips or dirt? Does your child have a family member or friend who has or did have an elevated blood lead level? Is your child a newly arrived refugee or foreign adoptee? Does your child come in contact with an adult whose job or hobby involves lead exposure? <p>Examples:</p> <ul style="list-style-type: none"> House construction or repair Battery manufacturing or repair Burning lead painted wood Automotive repair shop or junk yard Going to a firing range or reloading bullets Chemical preparation Valve and pipe fittings Brass/copper jewelry Refueling furniture Making fishing weights Radiator repair Pottery making Lead smelting Welding Other _____ <p>7. Does your family use products from other countries such as pottery, health remedies, spices, or food?</p> <p>Examples:</p> <ul style="list-style-type: none"> Traditional medicines such as Ayurvedic, ginseng, aloe vera, kava, ginkgo, ginseng, ginseng, ginseng, and ginseng Cosmetics such as kohl, surma, and sindoor Imported or ground pottery, imported candy, and imported nutritional pills other than vitamins Products carried or packaged outside the U.S. 																			
		<table border="1"> <thead> <tr> <th>Yes or Don't Know</th> <th>No</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </tbody> </table>		Yes or Don't Know	No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Yes or Don't Know	No																		
<input type="checkbox"/>	<input type="checkbox"/>																		
<input type="checkbox"/>	<input type="checkbox"/>																		
<input type="checkbox"/>	<input type="checkbox"/>																		
<input type="checkbox"/>	<input type="checkbox"/>																		
<input type="checkbox"/>	<input type="checkbox"/>																		
<input type="checkbox"/>	<input type="checkbox"/>																		
<input type="checkbox"/>	<input type="checkbox"/>																		
<p><i>To protect and improve the health and environment of all Kansans</i></p>																			

10

		KDHE Regulations	
<p>KANSAS ADMINISTRATIVE REGULATIONS (K.A.R.)</p> <p>Agency 28</p> <p>Kansas Department of Health and Environment</p> <p>Article 1—Diseases</p> <p>28-1.2. Reporting requirements for infectious or contagious diseases and conditions. (a) Each person licensed to practice the healing arts or engaged in a postgraduate training program approved by the state board of healing arts, licensed dentist, licensed professional nurse, licensed practical nurse, administrator of a hospital, licensed adult care home administrator, licensed physician assistant, licensed social worker and teacher or school administrator shall report each suspected case of the following infectious or contagious diseases or conditions to the secretary within four hours of knowledge of the suspected case:</p>			
<p>Report each case of the condition to KDHE within 24 hours.</p>		<p>(c) Each person specified in subsection (a) shall report each case of the infectious or contagious diseases or conditions specified in this subsection to the secretary within 24 hours, except that if the reporting period ends on a weekend or state-approved holiday, the report shall be made to the secretary by 5:00 p.m. on the next business day after the 24-hour period. Each report for the following shall be required only upon receipt of laboratory evidence of the infectious or contagious disease or condition, unless otherwise specified or requested by the secretary:</p>	
		<p>The condition to report to KDHE.</p> <p>(5) blood lead level, any results;</p>	
<p><i>To protect and improve the health and environment of all Kansans</i></p>			

11

		Reporting Variables	
<p>(d) Each person specified in subsection (a) shall report the following information in a manner specified by the secretary for any suspected case or case required to be reported by subsection (a):</p> <p>(b), or (c).</p> <p>(1) The following personal information for each patient:</p> <p>(A) First and last names and middle initial;</p> <p>(B) address, including city, state, and zip code;</p> <p>(C) telephone number, including area code;</p> <p>(D) date of birth;</p> <p>(E) sex;</p> <p>(F) race;</p> <p>(G) ethnicity (specify if hispanic or non-hispanic ethnicity);</p> <p>(H) pregnancy status;</p> <p>(I) date of onset of symptoms; and</p> <p>(J) diagnosis;</p> <p>(2) type of diagnostic tests;</p> <p>(3) type of specimen;</p> <p>(4) date of specimen collection;</p> <p>(5) site of specimen collection;</p>			
		<p>(6) diagnostic test results, including reference range, titer if quantitative procedures are performed, and all available results concerning additional characterization of the organism;</p> <p>(7) treatment given;</p> <p>(8) name, address, and telephone number of the attending physician; and</p> <p>(9) any other necessary epidemiological information and additional specimen collection or laboratory test results requested by the secretary or local health officer. (Authorized by K.S.A. 65-101, K.S.A. 2017 Supp. 65-128, K.S.A. 65-1,202, and K.S.A. 65-6003; implementing K.S.A. 65-101, K.S.A. 2017 Supp. 65-118 and K.S.A. 65-6002; effective May 1, 1982; amended May 1, 1986; amended Dec. 24, 1990; amended April 19, 1993; amended Jan. 12, 1996; amended Dec. 1, 1997; amended Feb. 18, 2000; amended, T-28-11-20-03, Nov. 20, 2003; amended March 5, 2004; amended April 28, 2006; amended May 11, 2018.)</p>	
<p><i>To protect and improve the health and environment of all Kansans</i></p>			

12



Capillary Samples

Capillary samples are used only for screening purposes; meaning the first time a child or adult has been tested for lead. All elevated capillary samples with a result of 5 ug/dL or greater must be confirmed by a venous sample. See the [Elevated Blood Lead Case Investigation and Management Algorithm \(Appendix B\)](#) for the recommended testing schedule. Once a patient has a confirmed elevated blood lead level from a venous sample, all follow-up testing must use a **venous sample**.

To protect and improve the health and environment of all Kansans

13



Elevated Blood Lead Level

CASE DEFINITION

Elevated Blood Lead Level, Childhood

Criteria for Case Investigation and Management:

- Blood lead test result greater than or equal to 5 micrograms per deciliter (µg/dL) for persons less than 16 years of age on the day the blood sample was drawn.

Elevated Blood Lead Level, Adult

Criteria for Case Investigation and Management:

- Blood lead test result greater than or equal to 5 micrograms per deciliter (µg/dL) for persons 16 years of age or older on the day the blood sample was drawn.

To protect and improve the health and environment of all Kansans

14



Blood Lead Testing in Children

- Lead Risk Questionnaire
- Blood lead screen – capillary
- Blood lead test – venous



To protect and improve the health and environment of all Kansans

15



Elevated Blood Lead Test



Testing for lead poisoning

- Elevated capillary test requires a confirmatory blood test.
- KDHE case management algorithm assists local health departments with elevated blood lead cases.
- Elevated blood lead levels require further case investigation.

To protect and improve the health and environment of all Kansans

16



2019 Testing Rates in Kansas

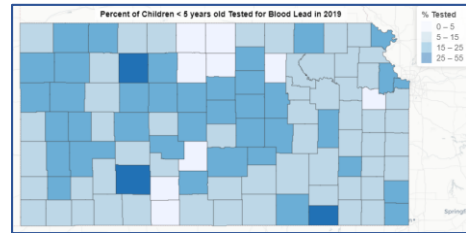
Population Type	Age Group	Children Tested	Total Population	Percent Tested
State (incl. Medicaid Enrolled)	12 to < 24 months	13667	36037	37.9
Medicaid Enrolled	12 to < 24 months	7316	32131	22.8
State (incl. Medicaid Enrolled)	24 to < 36 months	5671	37321	15.2
Medicaid Enrolled	24 to < 36 months	3778	32587	11.6
State (incl. Medicaid Enrolled)	0 to <= 72 months	26460	224162	11.8
Medicaid Enrolled	0 to <= 72 months	15347	125719	12.2

To protect and improve the health and environment of all Kansans

17



Testing Rates in Kansas

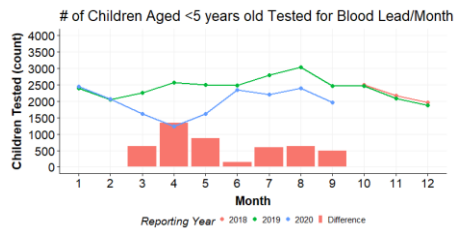


To protect and improve the health and environment of all Kansans

18



Testing Rates in Kansas



To protect and improve the health and environment of all Kansans

19



Sources of Lead Exposure

Examples of Sources:

- Imported goods
 - Dishware
 - Cosmetics
 - Jewelry
 - Spices
 - Candies
 - Home remedies



To protect and improve the health and environment of all Kansans

20



Sources of Lead Exposure



Additional Examples of Sources:

- Secondary/take-home lead
- Occupational exposure
- Hobbies

To protect and improve the health and environment of all Kansans

21



Lead Poisoning

Lead exposure can cause acute poisoning and chronic poisoning.



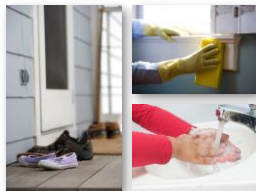
To protect and improve the health and environment of all Kansans

22



Preventing Lead Exposure

- The best prevention is awareness and elimination of possible lead sources.
- Get a blood lead test.
- Wash your hands.
- Regularly clean around the home.
- Eat a balanced diet.
- Avoid bringing home lead dust from a job or a hobby



To protect and improve the health and environment of all Kansans

23



Importance of Nutrition

Children are adversely and disproportionately effected by lead poisoning for a multitude of reasons.

- Environmental Exposures
- Behaviors and mobility
- Physiology
- Growth and Development
- Nutritional Deficiencies

To protect and improve the health and environment of all Kansans

24



WIC and Blood Testing in Children

WIC Allowable Costs-Clarification of WIC's FY 2001 Appropriations Act Provision Regarding Blood Lead Screening states that WIC State agencies must require that upon enrollment of a child, the parent or caretaker must be asked if the child has had a blood lead screening test.

If the child has not had a test, they must be referred to where they can obtain such a test.

To protect and improve the health and environment of all Kansans

25



WIC Collaboration

- Developed nutritional flyer and informational materials
- Created a healthy eating infographic and incorporated it in the WICShopper app
- WIC Needs assessment survey



To protect and improve the health and environment of all Kansans

26



WIC Survey

Q1 - During a child's certification or re-certification visit, how often do you ask about the child's most recent blood lead test that is part of the Diet Questionnaire?

#	Answer	%	Count
1	Every time	33.33%	22
2	Sometimes	31.82%	21
3	Rarely	15.15%	10
4	Not Required	6.06%	4
5	Other	13.64%	9
	Total	100%	66

To protect and improve the health and environment of all Kansans

27



WIC Survey

Q2 - If the child has not had a blood lead test previously, do you refer them to a provider or local health department for testing?

#	Answer	%	Count
1	Yes	60.61%	40
2	No	16.67%	11
3	Other	22.73%	15
	Total	100%	66

To protect and improve the health and environment of all Kansans

28



WIC Survey

Q3 - Do you know who performs blood lead testing in your area for children?

#	Answer	%	Count
1	Yes	83.33%	55
2	No	12.12%	8
3	Other	4.55%	3
	Total	100%	66

To protect and improve the health and environment of all Kansans

29



WIC Survey

Q4 - If a child has not had a blood lead test previously, do you perform a blood lead capillary screening test?

#	Answer	%	Count
1	Yes	19.70%	13
2	Sometimes	13.64%	9
3	No	22.73%	15
4	I refer to a provider or local health department	33.33%	22
5	Other	10.61%	7
	Total	100%	66

To protect and improve the health and environment of all Kansans

30



WIC Survey

Q5 - Do you provide follow-up or referral services for a child with an elevated blood lead test when you know about it?

#	Answer	%	Count
1	Yes	57.58%	38
2	No	1.52%	1
3	That is not part of my job responsibilities.	3.03%	2
4	I refer them to their provider or local health department.	28.79%	19
5	Other	9.09%	6
	Total	100%	66

To protect and improve the health and environment of all Kansans

31



WIC Survey

Q6 - During any of the visits with parents, do you provide the family with information regarding childhood blood lead poisoning prevention?

#	Answer	%	Count
1	Yes	43.94%	29
2	No	13.64%	9
3	Sometimes	37.88%	25
4	Other	4.55%	3
	Total	100%	66

To protect and improve the health and environment of all Kansans

32



WIC Survey

Q7 - What types of educational materials regarding childhood blood lead poisoning would be helpful for you to have to provide to families?

#	Answer	%	Count
1	Recommended testing guidelines	4.62%	3
2	Lead poisoning prevention fact sheet	9.23%	6
3	Nutritional recommendations to reduce lead absorption	6.15%	4
4	Other fact sheets	4.62%	3
5	All of the above	75.38%	49
	Total	100%	65

To protect and improve the health and environment of all Kansans

33



WIC Collaboration

Keep Heavy Metals From Weighing You Down

Heavy metals (like lead, arsenic and cadmium) can build up in your body. This can lead to heavy metal poisoning and can make you sick. To prevent heavy metal poisoning, eat a variety of healthy foods. Healthy foods can also help remove metals if you have high levels of heavy metals already in your body.

Calcium and Vitamin D <ul style="list-style-type: none"> Yogurt Cheese Milk Green leafy vegetables Sardines Egg yolk 	Iron, Zinc and Copper <ul style="list-style-type: none"> Lean meats, nuts and beans EGG Sea and lake Green leafy vegetables Sardines Nightly, cheese and milk
Vitamin C <ul style="list-style-type: none"> Orange and grapefruit Broccoli Strawberries Cauliflower 	Fiber <ul style="list-style-type: none"> Wheat, oatmeal and popcorn Beans Peas, orange and carrots Apples Other vegetables and fruits Quinoa, oatmeal and popcorn

Childhood PREVENTION

Did You Know?

Your child needs Vitamin D when they are born. Vitamin D helps you absorb calcium, which can help prevent heavy metal poisoning.

To protect and improve the health and environment of all Kansans

34



WIC Collaboration

KEEP HEAVY METALS FROM WEIGHING YOU DOWN

Heavy metals (like lead, arsenic and cadmium) can build up in your body. This can cause heavy metal poisoning and can make you sick. Eating healthy foods can reduce heavy metal poisoning. Eating foods like the ones on this plate can help to remove heavy metals.

Childhood PREVENTION

To protect and improve the health and environment of all Kansans

35



WIC Collaboration

KEEP HEAVY METALS FROM WEIGHING YOU DOWN

Heavy metals (like lead, arsenic and cadmium) can build up in your body. This can lead to heavy metal poisoning and can make you sick. To reduce heavy metal poisoning, eat a variety of healthy foods. Healthy foods can also help remove metals if you have high levels of heavy metals already in your body.

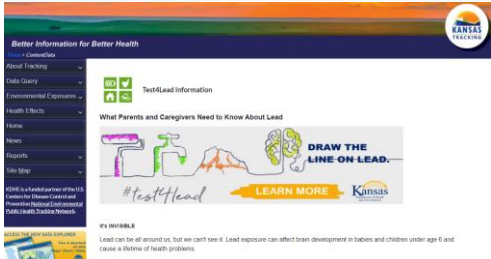
For more information, visit www.kdheks.gov.

Childhood PREVENTION

To protect and improve the health and environment of all Kansans

36


Kansas Tracking Program Website



To protect and improve the health and environment of all Kansans

37

Kansas Draw The Line On Lead Campaign



The campaign was marketed during August and September of this year and included:

- YouTube video advertising in English and Spanish
- Google Ad Network display ads in English and Spanish
- Facebook advertising in English and Spanish
- Broadcast PSAs in English and Spanish
- Broadcast buys to support PSAs in select targeted markets
- PR and influencer outreach

To protect and improve the health and environment of all Kansans

38

Kansas Google Ad Results

County	Impressions	Views	View Rate %
Allen English Ad	56,119	8,554	22.08
Barton English Ad	15,137	8,295	23.57
Cherokee English Ad	64,179	15,767	24.57
Clatsop English Ad	13,681	8,682	25.77
Crawford Spanish Ad	6,513	1,158	27.78
Donner English Ad	20,750	5,480	26.41
Donner Spanish Ad	19,117	5,029	26.35
Franklin English Ad	11,167	4,863	22.51
Franklin Spanish Ad	19,375	5,601	28.91
Garfield English Ad	65,384	16,611	26.12
Montgomery English Ad	59,523	16,972	28.51
Montgomery Spanish Ad	3,155	892	28.27
Nebraska English Ad	22,215	6,062	24.66
Nebraska Spanish Ad	1,221	437	35.79
Saline English Ad	62,747	17,277	27.53
Saline Spanish Ad	2,241	872	27.79
Sevier English Ad	127,231	34,155	28.02
Sevier Spanish Ad	15,855	4,807	30.32
Shannon English Ad	111,372	30,060	30.07
Shannon Spanish Ad	13,718	3,964	28.81
Wagonwheel English Ad	69,086	24,129	27.31
Wagonwheel Spanish Ad	15,780	6,188	24.82
Total views and clicks	2,410,306	227,884	27.67

To protect and improve the health and environment of all Kansans

39

Kansas Draw The Line On Lead Campaign

Draw The Line On Lead 30 Second Video

To protect and improve the health and environment of all Kansans

40



Next Steps

- Utilization of various evaluation methods to determine and address data gaps
- Develop intervention strategies based on assessments and analyses to increase testing rates
- Collaborate with partners such as WIC to provide resources as requested and available

Polling Question

To protect and improve the health and environment of all Kansans

41



Counseling Tips

- Help us spread the message that there is NO safe level of lead and there is no way to know if a child has lead poisoning unless the child is tested.
- We recommend that at-risk children have a blood test at 12 months, 24 months, and at least once before they are 72 months of age.
- Become familiar with the lead risk questionnaire and remember that a lead poisoned child may not show any symptoms. There are more lead exposure routes than just lead-based paint.
- You can help the family to understand the importance of good nutrition and how it relates to overall health.

To protect and improve the health and environment of all Kansans

42



Questions?

Thank you

Jessica Willard, Program Manager
Childhood Lead Poisoning Prevention Program
785-296-3849
Jessica.Willard@ks.gov



To protect and improve the health and environment of all Kansans

43